

ABSTRACT OF THE DISCLOSURE

A nonwoven fabric comprises continuous polymer filaments of 0.5 to 3 denier that have been hydroentangled in a complex matrix for interconnecting filament loops, and that is otherwise substantially free of knotting, or of otherwise wrapping about one another. A process for making a nonwoven fabric comprises continuously extruding polymer filaments of 0.5 to 3 denier onto a moving support, pre-entangling the filaments with water jets, and entangling the filaments with a second set of water jets on a three-dimensional image transfer device. An apparatus for making a nonwoven fabric comprises means for continuously extruding substantially endless polymer filaments of 0.5 to 3 denier onto a moving support to form an unbonded web, a pre-entangling station for entangling the web with a plurality of water jets, and a plurality of water jets for final entanglement of the filament web on a three-dimensional image transfer device. In another aspect of the present invention, plural precursor webs, each comprising polymeric filaments, can be employed to form a laminated nonwoven fabric.